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REMARKS

Claims 8-21 and 23-25 are pending in the application. Reconsideration of the final rejection of the pending claims is respectfully requested in view of the following remarks. Those remarks are believed to be fully responsive to the Office Action mailed April 29, 2003 and to point out why the pending claims distinguish over the cited references. Entry of these remarks is requested as they are in response to new arguments advanced by the Examiner in paper number 6.

I. CLAIM REJECTION – 35 U.S.C. § 102

Claims 8-12 were rejected under 35 U.S.C. §102(e) over Yu et al. (US 6,165,052). This rejection is believed to be in error for at least the following reason. Claim 8 recites, in part, "...removing a material layer ... at a primary polishing station; and removing the barrier layer ... at a buff station" The first full paragraph on page 10 of the specification (as corrected by the preliminary amendment) recites: "In this regard, the term 'buff' pad and 'buffing' as used herein are generally defined to mean a material removing article excluding a primary polish step." This sentence distinguishes "buff" and "buffing" from a "primary polish step." A "primary polishing station" and a "buff station" are not the same. The Examiner has responded (paragraph 9) by saying that "primary" means first and any polishing or removing steps after the first polishing step are not "primary polishing steps." This may be linguistically correct, but it ignores the fact that "buff" and "buffing" have acquired distinct meanings and are now terms of art in the field of CMP. A buffing step or a buffing station is not any process or apparatus that is implemented or used chronologically after the first polishing step. Applicant previously stated that the Yu reference fails to disclose a buff station. This is incorrect. Applicants meant

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to state that Yu fails to disclose a buff station for removing the barrier layer. In fact, as noted by the Examiner, Yu does disclose buffing (for example, column 6, lines 38-44 and lines 50-52) in its common usage to remove slurry residue and microscratches. That disclosure supports Applicants' argument above that the term "buffing" is now a term of art. Yu only discloses the use of a polishing station or a "multiple polishing station CMP polishing machine" (column 6, lines 45-46) for removing the barrier layer. Accordingly, the Yu reference fails to disclose all of the recited elements of claims 8-12.

Claims 8-14 and 23-25 were rejected under 35 U.S.C. §102(c) over Easter et al. (US 6,368,955). This rejection is believed to be in error for at least the following reason, similar to the reason set forth in the preceding paragraph. The Easter reference does not disclose or suggest a buff station for removing the barrier layer as recited in independent claim 8. As discussed above with respect to the Yu reference, a primary polishing station and a buff station are not the same. The Easter reference discloses the use of two slurries to remove two different layers, but does not disclose or suggest removing the first layer at a primary polishing station and the second layer at a buff station as claimed. The Examiner's suggestion that a "second station" is equivalent to a "buff station" is contrary to Applicants' definition of a buff station and to the common usage of the terms by those skilled in the art of CMP. Like Yu, Easter uses the term buffing in a manner consistent with the art accepted definition. See, for example, the paragraph at the top of column 6. A "touch-up" or buffing step is used after the second polishing step (the second polishing step being the one used to remove the liner) to remove residual liner materials and to replanarize the exposed surface.

Independent claim 8 is thus believed to distinguish over the cited Yu and Easter references because neither reference discloses or suggests removing a barrier layer at a buff

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station as that term is defined in Applicants' specification and as the term is commonly defined in the field of CMP.

II. CLAIM REJECTION - 35 USC § 103

Claims 15, 17, 19 and 21 were rejected under 35 U.S.C. §103 over Easter in view of Somekh (US 5,897,426). Claims 19 and 21 were rejected under 35 U.S.C. §103 over Easter in view of Woo (US 5,816,891), claims 15, 16, and 19-21 were rejected under 35 U.S.C. §103 over Easter in view of Mikhaylich et al. (US 6,375,540), and claim 18 was rejected under 35 U.S.C. §103 over Easter in view of Easter (US 6,254,454). These rejections are believed to be in error for at least the following reason. As explained above, the Easter reference fails to disclose or suggest removing a first layer at a primary polish station and removing a second layer at a buff station as recited in claim 8 from which the rejected claims depend. The Somekh, Mikhaylich, Woo, and Easter ('454) references also fail to disclose or suggest the step of removing a second layer at a buff station as defined by Applicants and as that term is commonly used. Accordingly, at least one recited element of each of the rejected claims is neither disclosed nor suggested by the cited combination of references.

III. CONCLUSION


In view of the above remarks, it is now believed that the claims distinguish over the cited references and that the application is in condition for allowance. Such allowance is therefore earnestly requested. Should the Examiner have any questions or wish to discuss any aspect of this application, Applicants request that the Examiner contact the undersigned at (480) 460-8694.

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If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,


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Dated

July 28, 2003